

2. *Hysterectomy, or Supra-Vaginal Amputation for Fibroids.*—This operation may be divided into three stages—1st, the opening into the abdominal cavity; 2nd, the extraction of the tumor; 3rd, the treatment of the stump.

1. An opening in the abdominal wall is made from the ensiform cartilage to the pubes. The bladder is sometimes high up, and may have to be separated from off the tumor; as the bladder is more easily defined when distended, it should not be emptied before the operation.

2. The tumor is brought out through the abdominal incision. When the mass is large it may be difficult to draw the slippery tumor out. To get more purchase on it a nickle-plated corkscrew may be inserted into the tumor.

3. After removal of the tumor the ligatured stump is either dropped into the peritoneal cavity and treated intra-peritoneally, as in ovariectomy, or the stump is brought to the abdominal incision, and being fixed there, is treated extra-peritoneally.

The great point in the operation is to successfully secure the ovarian and uterine arteries, in order to prevent hæmorrhage. The question then arises, how can we best secure these arteries, and how should the stump be treated after removal of the tumor?

Schoeder and Martin advise that a double silk ligature be carried on a needle from behind, through the cervix, so as to come out at the bottom of the vesico-uterine pouch in front; this is divided, and the end of each half carried backwards through the broad ligaments of its respective side, just external to the cervix, and knotted to its corresponding end; the cervix is thus tied in two portions, and each uterine artery is controlled by a ligature. The tumor, with the body of the uterus, is now cut rapidly away, with a large knife, above the ligatures. The uterine stump is cut in a V shape, and first the muscular walls are adapted by coarser, then the peritoneal covering with finer sutures. Martin, at present, I believe, employs an elastic ligature to constrict the uterus before suturing the stump.

I had the pleasure of seeing Mr. Sutton, at Middlesex Hospital, perform this operation a couple of times. The method he adopted was to pass a ligature by means of a long curved needle as deeply as was possible, on either side of the cervix, which,

when tied, controlled most effectually, both the ovarian and uterine arteries. He then passed the wire of a *serre-nœud* around the neck of the tumor, which, when tightened, served as a safeguard against hæmorrhage. The uterus and tumor were then rapidly removed by a V-shaped incision, the wire of the *serre-nœud* loosened and removed with only a little oozing from the cut surface. The muscular walls were then carefully brought together with coarse, and the peritoneal covering with fine sutures.

While in London, I saw Dr. Bantock, at the Samaritan Hospital, remove a large fibroid with the uterus. He treats the pedicle extra-peritoneally and uses a *serre-nœud* to control the hæmorrhage. He does not apply any styptic or cautery to the pedicle when fixed in the abdominal wound, but dresses it with dry thymol gauze.

Dr. R. T. Smith did two hysterectomies while I was at the Hospital for Women, in Soho Square, both with success. He treated the pedicle in both of these cases extra-peritoneally.

Sir Spencer Wells and Péan, both favor the extra-peritoneal treatment of the pedicle. Péan describes the operation as follows: The tumor is drawn out of the abdomen and held perpendicularly by an assistant. The operator transfixes the cervix with two strong wires at right angles to each other; below these wires he passes a curved needle through the cervix and drags back a double wire; this wire is divided and each half is fitted into a *serre-nœud* by means of which it is both tightened and twisted. The tumour and uterus are amputated above the wires; the pedicle is placed in the abdominal wound and is kept from retracting into the abdomen, by means of the wires and *serre-nœuds*; these are left in position, so that they may be tightened in case of hæmorrhage."

Keith prefers the application of a clamp to the *serre-nœud*.

Klieberg introduced the elastic ligature, which is passed double through the cervix, it is then cut and the two ends on each side firmly knotted.

Fritsch has had remarkable results without the employment of clamp, *serre-nœud* or elastic ligature. He uses stitches as in the intra-peritoneal method, the hæmorrhage being controlled by the employment of a temporary elastic ligature, until his stitches are placed in position. He proceeds as